

Study of Nutrients and Metal Pb Concentration in *Tailings* to Accelerate Revegetation Efforts in PT. Antam Tbk. UBPE Pongkor West Java

ABSTRACT

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PT Aneka Tambang (Persero) Tbk. UBPE (gold mining business unit) Pongkor is business units which run the gold ore into the latest result called *dore bullion*. In the implementation its operations, produce waste *tailing* materials which is placed in a shelter late at *Tailing Storage Facility* (main TSF), *Landfill* of Pamangon, Cikabayan Bawah and Bantar Karet I. Currently, a small location in the Pamangon *Landfill* just overgrown with *Thypha angustifolia linne sp* grass itself without any treatment. The purpose of this study conducted to determine the content of nutrients (N-total, P, K, Ca, Mg, Mn), pH and also range of metal Pb concentration. Furthermore, wanted to find out the strategy on how to speed up the growth of *Typha angustifolia linne sp.* by several treatments of organic growing media.

A research methods using include the surveying method, chemical analysis method, interpolation and experimental design planting of *Typha angustifolia linne sp.* with repeated observations. From these results, the average pH of *tailings* are normal, the availability of N-total nutrient is obtainable, P, Mg very low and the elements of K, Ca, Mn with high dignity.

According on this research, the best mixing media composition planting which to highly accelerate plant, an absorption of Pb and Mn acquired in range of ratio *tailings* (3): Compost (2): top soil (1). Whereas, the best media composition planting which to speeding up the growth of plant shoots was gained in ratio of *tailings* (3) : OR-1 fertilizer (1) : top soil (2). The others management efforts based on intended technical approach in this research area such as improvements of nutrients with using charcoal, *ameloriant* straw, chicken fertilizer, and selection of other grasses.

Keywords: *Tailing*, the nutrient, metal of Pb, *Typha angustifolia linne sp.*,